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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,231	12/18/2000	Jacek F. Gieras	60,469-031	4502

7590 01/23/2004

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EXAMINER

ELKASSABGI, HEBA

ART UNIT PAPER NUMBER

2834

DATE MAILED: 01/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,231

Applicant(s)

GIERAS ET AL.

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/12/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 and 23 is/are allowed.
- 6) ☒ Claim(s) 10-11, 14-16, 21 is/are rejected.
- 7) ☒ Claim(s) 13, 17-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

**THE FINAL OFFICE ACTION MAILED ON 04/24/2003 IS WITHDRAWN.
PROSECUTION IS BEING REOPENED FOR THIS APPLICATION.**

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

- A. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim limitation of "relative rotary motion" is not understood in a manner that the examiner fully understands in regards to "relative". For purpose of prosecution the examiner interprets that the stator and rotor are supported in any manner in regards of the rotor motion.
- B. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The bonding agent needs to be disclosed in a full, exact and clear and concise manner in order for the examiner to fully understand exactly the type of bonding agent that the applicant is claiming.
-

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Lange (U.S. Patent 5289072).

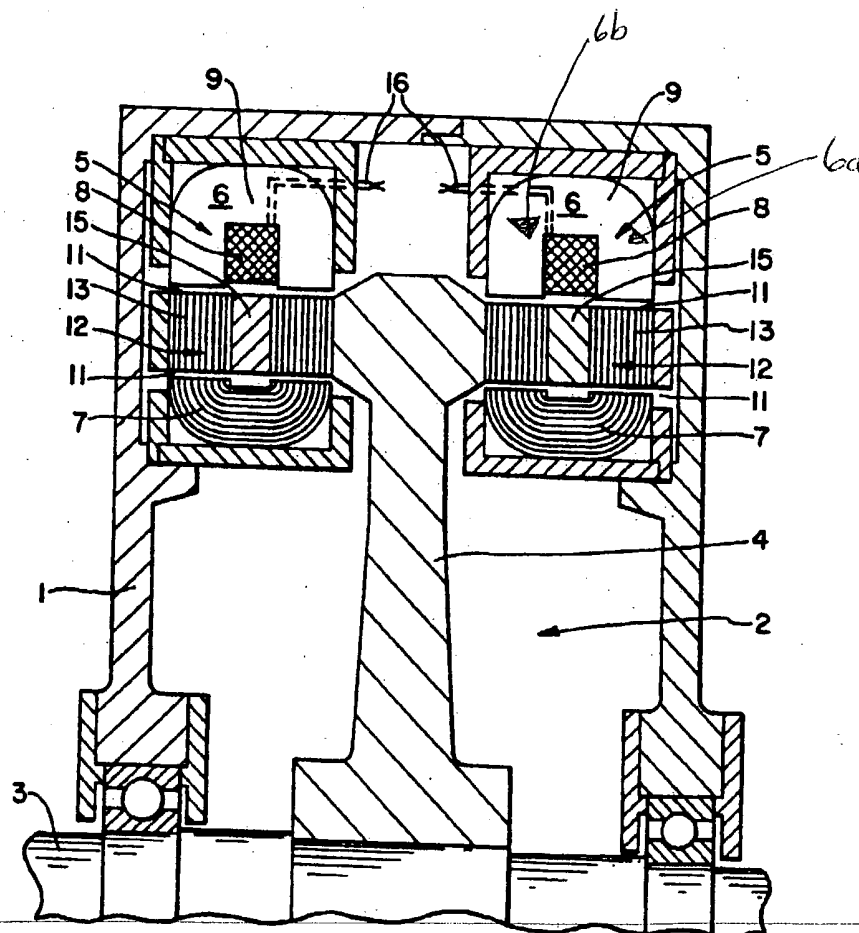
The examiner interprets Lange in the following two ways, both of which anticipate applicant's invention:

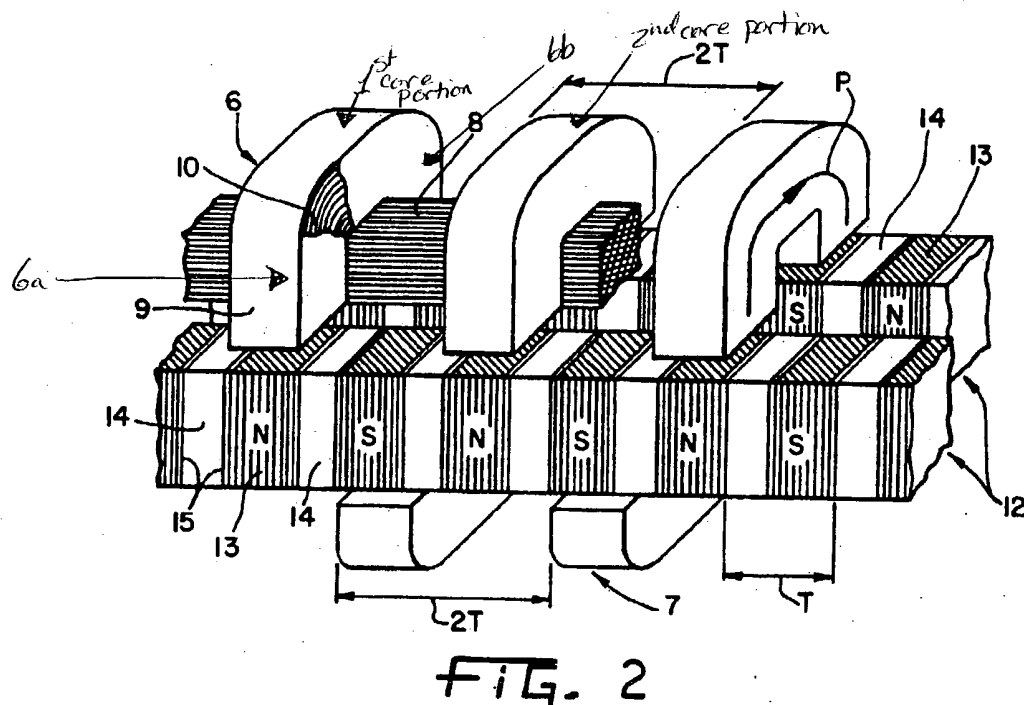
A. Lange illustrates in Figure 1 a motor having a stator assembly (5) with first and second stator core portions (6a& 6b), which correspond to the end portions of the U-shaped element (9, as denoted by the examiner in the attached figures below). A coil (winding 8) is situated between the core portions (6, 6a-6b) with at least part of an axial surface of the coil (winding 8) is covered by the core portions (6,6a-6b). In regards to claim 16, The stator core portions (6,6a-6b) form a generally annular ring that have a plurality of circumferentially spaced projections that project radially inward from the ring. Additionally, a rotor (2) having a core (12) and a plurality of magnets (13). In which the stator and a rotor are supported in a relative rotary motion, and that the plurality of magnets (13) of the rotor (2) interacts with the stator core portions (6,6a-6b) during relative rotary motion.

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B. Claim 10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Lange (U.S. Patent 5289072).

Lange illustrates in Figure 1 and figure 2 a motor having a stator assembly (5) with first and second stator core portions each comprising a U-shaped armature elements (9) (see column 2 lines 46-63, see Figure 2), in which a prewound coil (winding 8) nestingly supported between the core portions (9) with at least part of an axial surface of the coil (winding 8) covered by the core portions (9, see Figure 1). A rotor (2) having a core (12) and a plurality of magnets (13), in which the stator and a rotor are supported in a relative rotary motion, and that the plurality of magnets (13) of the rotor (2) interact with the stator core portions (6) during relative rotary motion.





Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Claims 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lange (U.S. Patent 5289072) as applied to claim 10 above, and further in view of In re Leshin.

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As described above with reference to Claim 10, Lange discloses the claimed invention except for the material of the stator core portions being of sintered powder material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a suitable material for the stator core portions, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

B. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lange (U.S. Patent 5289072) as applied to claim 10 above, and further in view of Weh (U.S. patent 5051641).

As described above with reference to Claim 10, Lange discloses the claimed invention except for the support members.

Weh illustrates in Figure 4 a motor in which a plurality of magnetic stator core portions (EI a and EIb) are partially enclosed on the outward axial surfaces of the core portions by two support structures (casing ZGa and ZGb), in order to provide magnetization toward the axis of movement.

It would have been obvious to one of ordinary skill in the art to combine the motor structure of Lange and that of the casing of Weh in order to provide the axis of movement by way of magnetization.

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C. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lange (U.S. Patent 5289072) as applied to claim 10 above, and further in view of von Zweghergk (U.S. Patent 5117142).

As described above with reference to Claim 10, Lange discloses the claimed invention except for the laminated core portions.

von Zweghergk illustrates in figures 5a and 5b that the stator core portions are of laminated sheet metal in order to produce a higher yield of efficiency.

It would have been obvious to one of ordinary skill in the art to combine the structure of the motor of Lange with the structure of the stator cores of von Zweghergk in order to acquire a higher yield of efficiency.

Allowable Subject Matter

Claims 22-23 are allowed.

Claims 13, 17, 18, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-23, have been considered but are moot in view of the new ground(s) of rejection.

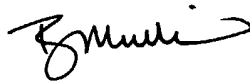
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Burt Mullins can be reached on (703) 305-7063. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HYE


BURTON S. MULLINS
PRIMARY EXAMINER